FRUIT FLY TRAP TYPES

The glass McPhail trap is a general-purpose trap capable of detecting any of the fruit flies. It is the main trap available for Mexican and Caribbean fruit fly. This trap is baited with a mixture of water, yeast and borax. This food bait will attract native flies as well as exotic pest fruit flies. The trap pictured here is a glass trap, but there is also a new, improved plastic version of the McPhail trap.

This white cardboard delta-shaped trap is a Jackson trap and it is hung in fruit trees. It is used for the detection of Mediterranean, Oriental, Melon and other related fruit flies. Sex attractants are placed on the cotton wick inside the trap. The Jackson trap baited for the Melon and Oriental fruit fly also contains a few drops of diluted insecticide to stun the flies when they enter the trap. A sticky cardboard insert at the bottom of the trap holds the flies and/or other insects.

GYPSY MOTH

The gypsy moth complex originates from Europe and Asia, and was introduced into the eastern United States in 1869. The adult moths do not feed, but the larval (caterpillar) stage consumes the leaves of many trees and shrubs. Entire forests are periodically defoliated in the New England states by this pest. Several small infestations of gypsy moth have been eradicated in California. We would like to protect our residential trees and commercial forests from this devastating pest. The basic difference in the two types is that the female Asian Gypsy Moth is able to fly and the European female (above) cannot.

The gypsy moth trap resembles the Jackson trap except that it is green. The moths are attracted to the trap by a pheromone mimicking its mating attractant.

JAPANESE BEETLE

The Japanese beetle may enter our country as larvae in un-inspected nursery stock or more likely as adults hitchhiking aboard commercial aircraft leaving infested eastern airports. Around 1917, it was brought into New Jersey from Japan in the soil surrounding potted plants. Since then, it has quickly spread and become a major pest in the eastern United States. The female Japanese beetle lays her eggs in soil where they hatch and the larvae (grubs) feed primarily on the roots of grasses. After a year of development, the adult beetle emerges to feed on roses, grapes, peaches, plums, apple, corn, elms and over 300 other kinds of plants. The adult beetles are quite active and may be seen flying in bright sunshine or in groups feeding on roses or ripe fruits. The Japanese beetle is frequently confused with the common Green Fruit beetle, or Fig beetle. The Japanese beetle is less than one-half inch long and has a shiny green head and a bronze back. The Fig beetle is one inch long and has a velvety green back.

The trap used for the Japanese beetle is usually placed out in the middle of lawns or near rose bushes. The fins on the top of the trap help direct the beetle down into a small cylinder at the base of the trap where they cannot escape. The trap uses a very strong chemical attractant called a pheromone to lure the beetles into the trap.

Your County Insect Trapper is:

_____

Traps were placed in these trees:

_____

_____

_____

INSECT PEST DETECTION PROGRAM

COUNTY OF SAN BERNARDINO

Department of Agriculture Commissioner/ Sealer of Weights and Measures

777 East Rialto Avenue
San Bernardino, CA
92415-0720

PH # (800) 734-9459
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John G. Gardner
Agricultural Commissioner / Sealer

The introduction of exotic insect pests is a threat to the farm crops, forests, parks and home gardens of all California residents. When an insect pest is introduced into an area in which it doesn't naturally occur, it can multiply and spread rapidly. Without their natural enemies, fruit flies, gypsy moths or Japanese beetles could flourish in San Bernardino County. They would have plenty to eat and nothing to stop them from increasing their numbers.

The San Bernardino County Department of Agriculture/Weights and Measures, with the assistance of the California Department of Food and Agriculture, establishes and maintains insect pest detection traps on twelve properties per square mile throughout the valley area of San Bernardino County and limited placement in Desert communities. By allowing us to establish and subsequently service detection traps on your property, you can help us protect your environment and keep food costs down. There is no charge for this service. Trappers examine each trap periodically. It is through this method of detection that a small infestation may be found and eradicated promptly before it becomes firmly established.

Several species of fruit flies are among the world's most damaging insect pests. Fruit fly populations spread and new infestations start when people transport infested fruits and vegetables. If any of these fruit flies become established in California, backyard and commercial fruits and vegetables would soon become infested. The result would be:

- Maggot-riddled home grown fruits and vegetables.
- Massive increase in the use of pesticides.
- Higher produce prices for the consumer.
- Foreign countries implementing trade embargoes.
- California produce placed under federal quarantine.

Fruit flies attack hundreds of different kinds of fruits and vegetables. The damage begins when the female fly lays her eggs under the skin of the fruit. These eggs hatch into larvae (maggots), which burrow into the fruit and feed, turning it into a rotten mass. Infested fruit spoils and may drop to the ground. Please note, however, that several native insects may also cause similar symptoms and rotten fruit is not necessarily the result of a fruit fly infestation. It is extremely unlikely that one would see a wild adult exotic fruit fly in San Bernardino County even if there were an infestation. The only way trained personnel from the Agricultural Commissioner's office find them is through the use of detection traps.

MEDITERRANEAN FRUIT FLY

The Medfly would be a particularly unwanted visitor to San Bernardino County. Originally from West Africa, it spread throughout the Mediterranean region by 1850. Many tropical and subtropical areas of the world are infested with this pest. It was introduced into Hawaii in 1910 and is now a major pest there. The Medfly attacks over 260 fruits and vegetables and is potentially the most destructive of the fruit flies that threaten agriculture worldwide. Preferred hosts are apricots, nectarines, peaches, apples, figs and citrus, but it could attack most fruits grown. Medfly infestations in California in past years have most probably been started by illegal shipments of infested fruit sent through the U.S. Mail, UPS or FedEx and as a result of travelers "smuggling" in fruit that is infested with Medfly maggots.

Currently 125,000 sterile Medflies per square mile per week are being released by airplane throughout the San Bernardino valley area in order to combat potential wild Medfly introductions. These flies are harmless to backyard fruit trees due to their inability to reproduce in fruit, and will prevent future wild fly infestations. This program has eliminated the need for more extreme eradicative measures as have been utilized in the past.

MEXICAN FRUIT FLY

This fruit fly is a native to northern Mexico and has spread to most fruit-growing areas of that country. Untreated and infested fruits mailed or carried by travelers to San Bernardino County could start infestations of this "super pest." Some of the host trees favored by Mexican fruit fly include sapote, grapefruit, mango, peach and avocado. The Mexican fruit fly is long-lived and a strong flyer, and may travel up to 150 miles. It periodically invades the citrus-growing areas of southern Texas from Mexico. Mexican fruit fly is difficult to detect and eradicate and is especially feared by fruit growers.

ORIENTAL FRUIT FLY

Oriental fruit fly is another of the world's most harmful fruit flies. Originally from Southeast Asia, it has spread to many Pacific Islands, including Hawaii, where it is a major pest. The Oriental fruit fly attacks over 230 different kinds of fruit. Preferred host fruits in San Bernardino County include Catalina cherry, guava, avocado, peaches, plums, citrus, peppers and tomatoes.

MELON FRUIT FLY

The Melon fly differs slightly from the other fruit flies in that it prefers vegetable crops like squash, cantaloupe, watermelon, cucumbers, pumpkins, tomatoes, beans, and eggplant. It will attack over 70 other plants as well. Melon fly originated in Southeast Asia and is now found in Africa, the Philippines and other Pacific Islands. It is a significant pest in Hawaii and people mailing or carrying illegal infested fruit from these areas could start an infestation of Melon fly in California.